

There are no free passes to Success. Fortune has an interstate commerce law of her own—she won't dead-head any one.

## You Can't Do As You Please

WE can't attend to our business without minding yours—you can NOT do as you please.

Every piece of the world's work relates to another action. Civilization is organized effort. We are all parts of one machine and no single cog can run amuck without disturbing the section to which it belongs.

You are entitled to equal rights, but that does not signify that you are independent. Justice is standardization of privilege: Democracy a banding together of individuals for the promotion and safeguarding of mutual interests—a license to liberty as emphatically opposed to the liberty of license.

A state of society in which every one could act as he liked would be intolerable and impose constant hardships upon the majority.

Fair government insists upon the restraint of selfishness and demands the observance of very definite laws of conduct and procedure—without which conscienceless ambition would ride roughshod.

Within these reasonable limits of action you are a guaranteed free agent with all the power of the Republic to warrant the exercise of your franchise. But when you exceed these bounds you must submit to the same correcting forces you stand ready to evoke when others outrage your rights.

The terms under which you are permitted to operate your affairs, possibly block your plans at times and inflict a personal disadvantage, but remember they express the will of the nation which stands ready to turn to grant you security against those who seek a proportionate disadvantage over you.

## At the Field Hospital

HUMAN lives on the bargain counter. Horseflesh dearer than man-meat. Death served by twenty million assistants. Packing house efficiency translated to the battlefield. Mile after mile of hospital trains. Ambulances, careening at break-neck speed. What a scarlet harvest!

Shattered skulls, broken faces, brain wounds, lung wounds, spleen wounds, groin wounds.

This poor devil won't live—that tattered carcass can't.

In normal times one might save the old peasant yonder, but such a laborious operation is out of the question, with a thousand other cases demanding instant attention. Percentage outweighs individuals—the greatest good for the greatest number rules.

So many dead—so many dying—and so many guns still pounding battalions to pulp! Life grows cheaper every day and death more commonplace. Few mysteries here. Among this groaning multitude, what curiosity may not be satisfied?

Try that experiment—it may work. In normal times you wouldn't dare, but there are so many thousands of them that one mischance won't count.

Besides, if any human reasoning can justify annihilation by platoons, then let a few serve future generations and die to save a myriad to come. Take that tendon, or better still, transplant the shin. Quick! Clamp—clamp—clamp—suture! If it works, an illustrious page has been added to medical history! The other one? Oh, he was already doomed. Anyhow, he was an enemy.

# Government May Aid in Turning Gifts of the Sea Into Fruits of the Farm

TWO neighbors on the coast of California met.

"Where are you going this morning with your mowing machine?" was the question casually asked by the one ashore.

"About two miles out to sea, to cut fertilizer. Potash is worth \$500 a ton now," was the answer given in a matter-of-fact tone.

And the one was not crazy, nor the other joking, as the "mowing machine" steamed away from the shore on the long swell of the Pacific ocean. It was only an outfit on its way to the kelp groves for a load of that remarkable marine plant which will, the Department of Agriculture predicts, furnish an inexhaustible supply of potash.

The harvesting crew consists of several men on a couple of scoops, and they gather about a hundred tons of kelp a day.

"The European war," said Dr. J. W. Turrentine, chemical engineer of the Department of Agriculture, "has cut off almost everything which the United States was importing from the middle empires, and as it depended exclusively upon Germany for its supply of potash for all purposes, including the production of artificial fertilizers, considerable embarrassment has resulted. Intensive farming, which is becoming more important to the successful agriculturist, cannot be had without potash, and its former price, \$20 a ton, has now advanced to \$500."

"The annual importation prior to 1914 of the then low-priced substance had been about 200,000 tons, requiring the payment of about 12,000,000 American dollars to the Kali-Syndikat, or potash trust of Germany. Even before the war efforts were made to find in this country supplies of potash satisfactory in quality and in cost of production to be of economic value. Since the war the necessity of meeting this demand has speeded up these efforts, with promising results.

"There is a growing recognition by people generally of the value to a nation of governmental aid to the industry of farming interest, and in this country the departments of the Interior, Agriculture and Commerce find it well within their provinces to search diligently for improved methods and markets, and to publish the results, so that individuals and capitalists may make the most of natural resources. Incidentally, this is based upon sound economics and is the foundation of national preparedness.

"Thus, if the Department of Agriculture can find a way to take potash out of the sea or the land at a low cost, it is developing a twelve-million-dollar business and preparing the country in case of need, to support itself independently of other nations, and some fine day it may require all these sources for its own protection and support. In its search for potash the Department of Agriculture has sent its exploration parties to the sites of old salt lakes in the deserts, hoping to find potash mines such as the Germans have.

"There they sank shafts through salt deposits and found potash in quantities large enough to justify their scientific theories, but failed to locate such deposits as to justify the capitalist in mining it. Since in Germany potash deposits are associated with deposits of rock salt, the salt mines of this country were explored for potash, but without favorable results.

"The German government, like most European countries, had assumed the monopoly of the salt mines, because, being a necessity to every one, the collection of the tax was certain and easy. It discovered in the section known as the Staßfurt region, in Alsace, "bitter salts," at first regarded as worthless, but later shown by Liebig to have great value as a fertilizer, a sort of "bracer" for exhausted and abused lands and

THE Value of Kelp Beds of Pacific Ocean to Makers of Potash—Difficulties to Be Overcome—European War Cuts Off Supply of Potash From Germany—Intensive Farming Demands Potash, and the Price Has Advanced From \$40 to \$500 a Ton—Work of Gathering Kelp Is Unpleasant—How the Marine Plant Grows—What Government Aid Would Mean.

growth something like a long stick of macaroni, only of the pale-green vegetable order, reaching from the holdfast to the high-tide surface of the sea, where it develops into a float, another vegetable growth, hollow like a small empty watermelon, but not so hard. From this many gigantic leaves spread over the water in every direction, impeding navigation and making a general nuisance of themselves, like a field of pond-lilies to a toy boat. In one of the most important helps the stem grows much longer, throwing out a series of big leaves. This variety also has many stems from the same holdfast.

Kelp is found in several varieties of differing value all along the Pacific coast, where the bottom has rocks enough for the holdfasts to grapple to and the tide runs swiftly enough to keep the water playing about the huge leaves, through which they take their nourishment from the ingredients of the seawater. One variety grows perennially and very rapidly. It grows the year around, so that if the grove is

to travel twenty miles from the works to the kelp groves. It carries in front, let down to a depth of several feet, reciprocating blades, like those of a mowing machine—not a lawn mower, but one that mows grass for hay, which cut the stems or anchor lines below the surface. A traveling carrier catches the great leaves and hauls them into the scow. Considerable salt water, of course, comes with the leaves, a fact which does not add to the pleasantness of things on board, especially when the water is rough. The kelp leaves are so large and slippery that they have to be cut to pieces before they can be treated, and the usual method is to pass them from the carrier under chopping knives, which cut them into pieces of convenient size.

The crew consists of two or three men, one of whom, standing at the bow, manages the submarine mowing machine, taking pains to push away with a long pole any floating substance which might strike the jiggling teeth of the cutting bars. He also does what he can to assist the kelp leaves upon the carrier.

Sometimes the scow is propelled by its own power, but often it is towed.



KELP HARVESTER, END VIEW, SHOWING CUTTING DEVICE IN WATER, CONVEYOR AND ENGINE.

large in proportion to the rate of cutting when the end of the lot is reached it is time to start again at the beginning. Another variety yields but one cutting a season. The leaves are so big and slimy that it is sometimes impossible to gather them after they have been cut by the mowing machine. The usual outfit consists of a big scow with living quarters for the men, and rudder, and the sloppy mass enriched with salt water slips around in



PELAGOPHYCUS PORRA, OR ELK KELP.

the scow, is said to have provoked impatient remarks from the traditionally calm and composed watermen along the coast.

But it is all in the day's work, and the next step is to take the scow or the fleet of them back to the landing. This is not always an easy job, at least it would not be for an amateur, but those men become very skillful and with the help of gasoline and a favorable tide return to the base at some time, even if not the one scheduled.

Once in port, the cargo must be unloaded, and it is even a little more difficult and unpleasant to handle it the second time, for it has had more time to wilt and so is more messy than before. Various methods have been devised

later methods is to chop or shred the kelp into smaller pieces as it is taken upon the scow, and when delivered on shore to run the product directly into a rotary kiln. There it is dried until the water content goes from 85 per cent to 10 per cent or less. The product when it comes out looks not wholly unlike a small, like the fish of the sea, broken and a good part of it powdered or crumbled into dust.

This product contains the potash and is an excellent fertilizer, although lacking in some important elements, and if it were not for the expense of transporting so bulky a product—being about ten tons from every hundred tons of kelp—it could be put upon the market and sold to good advantage. If there is not a good local market for the dried product and the freight rates to the place of delivery are high the transportation charges might absorb all the profit if the worthless vegetable matter and moisture content are shipped along with the potash. In consequence, an advertisement on the subject might read:

"Wanted—A method of extracting from dried kelp the elements which possess active value; these are potash, nitrogen and iodine."

The chemical engineers and manufacturers know how to get them, but the quantities of iodine and nitrogen are very small, and the market value of the potash is ordinarily not very great. The war will be over some day, the German potash fields are vast and the treatment of their output is inexpensive. Therefore the problem of freeing the valuable ingredients of the kelp product from the worthless at a cost so low as to leave a good margin of profit after paying for gathering the kelp and drying it is by no means easy and calls for efficiency of the first order.

To supply the farmers with the soil amendments without which they cannot obtain economic results, application has been made for government aid to put up an experimental plant to determine the best method of securing this indispensable element. Some of the largest fertilizer makers also are experimenting in the same direction, for at \$500 a ton they cannot put potash into their product and sell it at a price within reach. Consequently, the farmer is calling in vain for that which he has been given generously to the soil to secure from it a generous response.

One of the big manufacturers of high explosives has been asked for its gun-cotton, and it is now trying to get it from kelp by a process which will preserve some of the potash as a by-product.

These experiments for obtaining potash are, in a general way, based upon burning the dried kelp and treating the ash remaining after the organic matter has thus been eliminated. By leaching this ash and recrystallizing the product, high-grade potash salts, such as are required in making soap, glass and safety matches, are obtained. The details have not been worked out and thus far no large amounts of potash have been produced.

The advantage government development of such a process is that, like the Rittman process for cracking petroleum to increase the yield of gasoline, it is free to all who wish to use it, and thereby the general consumer has the opportunity to secure the oil put in abundance and at reasonable prices without payment of royalties or interference with patent rights.

There is practically no limit to the yield of kelp, for if the present groves are insufficient they can be increased by judicious planting of the spores, or seed germs, the only requirements being swift tides in something less than fifty feet of water over stony bottoms. Their presence, however, in ports or navigable waters would prove a nuisance to heavy shipping and a menace to light craft.

Sometimes, however, they are of assistance to the mariner, because their presence indicates shoal water, and they taken good pains to keep clear of them. On the Alaskan coast the pilots in some

## Believe Me, Bo

(The Roughneck Speaks on the Japanese Question)

I BEEN readin' by the papers that the busy little Jap Wants to tell us how we ought to run our corner of the map; We have trampled on his dignity and hurt him in the hide, We have mused his tender feelin's and forgot he has a pride; He's insulted, and he makes no bones o' mentionin' the cause, And the reason is a section our immigration laws. Claims he's better than the Hindus and Chinese—they're not his class. Says he'll stop his dealin' with us if we let the statute pass. With a million soldiers ready, and they're there—BELIEVE—ME—BO—

And a fleet that always occupies a front seat at the show, He don't have to wait outside the gate while others get the door, And he ain't above remindin' us that he won't sidestep war, Judgin' from my own experience, and hopin' you'll excuse A roughneck like Yours Truly givin' folks like you his views, Certain people are about to get a chance to prove their case; Mr. Trouble's in the neighborhood and shootin' off his face. I'm a hick, I don't know nothin', and it may be they are right, These gents who say a nation never has a cause to fight, That the gift of gab is worth as much as forts and air machines, And a peaceful disposition just the same as submarines; Howsomever, if you ask me I believe they're off their nut, And if you will take the viewpoint of an ordinary mutt, When a battler gets his Dutch up and he makes his little say, All the boys without their hardware let him have his own sweet way.

## Rifle Bullets and Bird Shot

THE profuse seldom perfect. Excess and excellence are never found in the same production.

Carelessness is a spendthrift. Hazy and lazy writers are word squanderers.

Charles A. Dana once begged to be excused for the length of a letter, "but," he added, whimsically, "I haven't time to write a shorter one."

Exactness requires care. The price of a good aim is heavy with practice ammunition. One rifle bullet will penetrate farther than a wagon load of birdshot. A single well considered, briefly expressed sentence will explain a situation which a page of hit and miss argument obscures.

A long-winded talk or message indicates that you are not well posted on the subject.

A fumbling narrative leaves a jumbled impression.

Smooth performances are impossible without adequate preparation. You can't interpret yourself or anything else before you thoroughly understand what you intend to do.

A great picture is a mixture of inspiration and art, and art is a tedious process, an elimination of confusion.

Paderewski's soul is filled with genius, but don't forget that his message would not carry if his fingers were not filled with training.

Every unpracticed hand is certain to strike false notes.

This is a basic principle in all transactions. It applies in selling a bill of goods, composing an opera, erecting a skyscraper and performing an operation—it is a truism in all activities from fiddling to financing.

When you really know it you can quickly show it.

## The Man Who Died Twice.

THERE are many puzzling features of French history, but perhaps the most puzzling of all, though it has to do with a comparatively minor personage, is that surrounding the mystery of the hairdresser of Marie Antoinette.

It is not a common occurrence for a person to die twice, a circumstance which has occurred in the case of this hairdresser, who was known as Jean Antie, alias Leonard.

This Antie, or Leonard, was a Gascon, born in 1758, who acquired a reputation in Paris by reason of his great ingenuity in building the elaborate coiffures of the time of Louis XVI. In 1791, while a group of condemned men were waiting their turn for execution, the guillotine broke down and had to be repaired. A number of victims had been executed, ten or a dozen were obliged to stand waiting until the repairs had been accomplished.

It appears that one individual, the twentieth on the list, whose hands were, as was the custom, bound behind his back, grew faint at the delay. He leaned against the line of officers that separated the prisoners from the mob of spectators. Suddenly a gap opened behind the man, almost unconsciously he slipped through, and the line closed once more. A bystander, exchanging and placed a hat on the man's bare head and the people crowded about as if to hide him. A short time after a man, with his hands behind him, was seen in the Champs-Élysées, walking with a group of one out for a quiet stroll. This man was said to have spent the next night in a ditch and to have made his way to Russia subsequently. If this person, saved by a fortunate accident or by collusion, was Leonard, the story explains the mystery of the two death certificates.

## In Other Words.

UNCLE JOE Cannon said in an address to the House of Representatives: "We'll always have successes and failures, as we always have good days and bad days, light and darkness, summer and winter."

"Why, if you reduced all men to one dead level, that level would soon get full of hillocks and hollows and lumps."

"In other words, even if you put the rich man under the poor man's feet, the poor man would only just be walking on his heels."